

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY  
(SUPPLEMENTARY SHEET)

AP20 Rec'd PCT/PTO 12 JUL 2006

Reference is made to the following documents:

**D1:** EP-A-1 304 474 (YAMAHA HATSUDOKI KABUSHIKI KAISHA)  
April 23 2003 (2003-04-23)

**D2:** FR-A-2 060 346 (MECANIQUE INDELÉ INTERNAL)  
June 18 1971 (1971-06-18)

**D3:** US-A-4 671 121 (SCHIELER ET AL) June 9 1987 (1987-06-09)

**D4:** US-A-5 152 170 (LIU ET AL) October 6 1992 (1992-10-06)

**D5:** EP-A-0 987 136 (MANNESMANN VDO AKTIENGESELLSCHAFT)  
March 22 2000 (2000-03-22)

**D6:** PATENT ABSTRACTS OF JAPAN Vol. 021, No. 019 (P-657),  
January 21 1988 (1988-01-21) & JP 62 175623 A (NISSAN SHATAI CO LTD), August 1 1987 (1987-08-01)

**Re: Item V**

1) The present application does not meet the requirements of PCT Article 33(1) because so far as can be understood (see item VIII at the bottom) the subject matter of claims 1 - 12 is not novel within the meaning of Article 33(2) or does not involve an inventive step within the meaning of PCT Article 33(3).

2) **Independent claim 1**

2.1) **D1** discloses (see figures 4-6 and corresponding text sections) a level sensor (24) for determining a fuel level in a fuel tank of a motor vehicle (cf. column 1, lines 28-34), with a support (23, 28) provided for fastening in the fuel tank, with a holding part (27) connected to the support, with a mounting, which is arranged on the holding part, for a lever arm (cf. column 6, lines 8-13) supporting a float, and with fastening means (27a, 28a) arranged on the holding part and the support, the fastening means (27a) of the holding part corresponding to the fastening means (28a) of the support (28) in positions of the holding part (27) in which it is rotated

about a horizontal axis and about a vertical axis (see figures 5-6).

2.2) **D2-D4** likewise disclose (cf. the passages cited in the international search report and the clarity objections in item VIII below) all of the features of claim 1.

2.3) Therefore, all of the features of claim 1 are disclosed in **D1-D4**. The subject matter of claim 1 is therefore not novel.

3) **Dependent claims 2-11**

3.1) Dependent claims 2-11 do not contain any features which, in combination with the features of any claim to which they refer, meet the PCT requirements for novelty and inventive step. The reasons are as follows:

3.2) The additional features of claims 2-3, 5-9 and 11 are present in at least one of **D1** to **D4**:

- Claim 2: see **D1**, figure 6.
  - see **D2**, figures 5-6.
  - see **D3**, figure 2.
  - see **D4**, figure 2.
- Claim 3: see **D2**, figures 5-6.
  - see **D3**, figure 2.
  - see **D4**, figure 2.
- Claims 5-6: see **D2**, figures 1 and 5.
  - see **D3**, figures 1-3 and column 6, lines 50-65
- Claim 7: see **D4**, figure 2.
- Claims 8-9: see **D1**, figures 5-6.
- Claim 11: see **D1**, figure 5.
  - see **D2**, figure 3.
  - see **D3**, figure 1.
  - see **D4**, figure 2.

Therefore, the subject matter of claims 2-3, 5-9 and 11 is not novel.

3.3) Dependent claims 4 and 10 concern only minor structural modifications of the kind that a person skilled in the art routinely makes on the basis of familiar considerations, especially since the resulting advantages are readily foreseeable (with regard to the plastic clip, see **D5**, column 3 line 29). Consequently, the subject matter of claims 4 and 10 does not appear to be based on an inventive step.

4) **Independent claim 12**

**D1** discloses a kit for a level sensor as claimed in claim 1 from which the subject matter of claim 12 differs in that two clips with opposite bent portions are provided.

The problem addressed by the present invention can therefore be considered that of providing a kit with which the levels in two fuel tanks can be measured.

However, this feature has already been used for the same purpose in a similar kit, cf. in this regard **D6**, in particular figures 1 and 3 and the abstract. If a person skilled in the art wished to achieve the same aim in a kit as per **D6**, he could easily apply this feature to like effect to the subject matter of **D1**. In this way he would arrive at a kit as per claim 12 without thereby being inventive. Therefore, the subject matter of claim 12 does not involve an inventive step (PCT Article 33(3)).

**Re: Item VIII**

- 1) If the applicant submits amendments, the requirements of PCT Rule 66.8 must be met and the points in the originally submitted application documents which support the amendments must be indicated (PCT Article 34(2)(b)), otherwise these amendments would not be taken into account in the international preliminary examination.

- 2) In the response, firstly the difference between the subject matter of the new claim and the prior art and secondly the meaning of this difference are to be stated.
- 3) The claims do not satisfy the clarity required pursuant to PCT Article 6 for the following reasons:
- 4) The feature used in **claim 1** "the fastening means of the holding part correspond to the fastening means of the support when the holding part is positioned in which it is rotated about a horizontal axis and about a vertical axis" is unclear for the following reasons:
  - It is not clear from this wording the extent to which the holding part is rotated about the particular axis: 90°, 180° or even 360°? This last possibility would not imply any restriction of the subject matter.
  - A person skilled in the art would not know what is to be understood by the term "correspond".
  - In addition, the above feature seems to relate to a method for using/constructing the device (rotation of the holding part) and not to the definition of the device with reference to *its technical features*. Contrary to PCT Article 6, the intended limitations are not clearly revealed in the claim.
- 5) From the wording of **claim 1** it is not clear which parts fasten the "fastening means" together.
- 6) The phrase "identical" in **claim 2** is vague and unclear and leaves the reader uncertain as to the meaning of the technical features in question. As a result, the subject matter of said claim is not clearly defined.
- 7) It is also not clear from the wording of **claim 2** whether the "fastening means" mentioned are the fastening means which are arranged on the holding part and which have already been

defined in claim 1, or whether additional fastening means are intended.

8) The references back in **claims 4-8 and 10-12** are unclear:

- Claims 4-5, 8 and 10: "the housing parts" have been defined for the first time in claim 3.
- Claim 6: "the receptacle" has been defined for the first time in claim 5.
- Claims 7 and 11: "the lever wire" has been defined for the first time in claim 4.
- Claim 12: "the clip" has been defined for the first time in claim 4.

9) A similar objection as in above item VIII.4 arises with regard to the feature "symmetrical with respect to the rotatable installation" of **claim 6**.

10) In **claim 12**, a person skilled in the art does not know which "opposite side" is meant. In claim 12 the "side facing away from a magnet of the position sensor or a contact of the potentiometer" has been defined, and so the "opposite side" which is meant to be the side situated by these sensors would be contrary to the description.